



राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला
National Institute of Technology, Rourkela

**Minutes for the 22nd Building & Works Committee, National Institute of Technology, Rourkela
to be held at 09.30 A.M. on 06.08.2014 (Wednesday) in the Board Room of the Institute.**

Members Present:

1. Prof. Sunil Kr. Sarangi, ... Chairman
Director, NIT, Rourkela.
2. Shri Vinod Kr Shrivastava, ... Member
DGM, Refrigeration & Air Conditioning,
RSP, SAIL, Rourkela.
3. Prof. S.K. Patra, ... Member
Professor, Dept. of Elect. & Comm. Engg.,
NIT, Rourkela.
4. Prof. C.R. Patra, ... Member
Professor, Dept. of Civil Engg.,
NIT, Rourkela.
5. Er. S.K. Upadhyay, ... Secretary
Registrar, NIT, Rourkela.

Members Absent:

1. Mrs. Amita Sharma, ... Member
Addl. Secretary, Dept. of Higher Education,
MHRD, New Delhi- 110 015
2. Shri Ajaya Kr. Nayak, ... Member
DGM, Civil Engineering,
Town Engineering Department, RSP, SAIL, Rourkela

Invitees Present:

1. Prof. Sanjeeb Mohanty, ... Invitee
Professor, Elect. Engg., NIT Rourkela.
2. Prof. Sarat Kr. Das, ... Invitee
Professor, Civil Engg., NIT Rourkela.
3. Prof. K. C. Biswal, ... Invitee
Professor, Civil Engg., NIT., Rourkela.
4. Dr. A.K. Panda, ... Invitee
Visiting Professor, Civil Engg., NIT Rourkela.
5. Prof. A.K. Sahoo, ... Invitee
Visiting Professor, Civil Engg., NIT, Rourkela.
6. Mr. Y.K. Sahu, ... Invitee
Visiting Professor, Elect. Engg., NIT, Rourkela.
7. Mr. S. P. Mohapatra, ... Invitee
Executive Engineer (CM), Estate, NIT Rourkela.

Invitees Absent:

1. Sri. D. Tripathy, ... Invitee
Executive Engineer, PWD, Uditnagar, Rourkela.

Leave of absence was approved for all members absent.

A) GENERAL AND PROCEDURAL MATTERS.

BWC:22 (2014)-01: Welcome to the members by the Chairman.

BWC:22 (2014)-02: Confirmation of the minutes of the 21th Meeting of the BWC held on 19.03.2014.

The minutes of the 21st Meeting were sent to the members vide letter No.NITR/2014/BWC-21/189, Dt.21.03.2014. No comments were received from the members.

BWC confirmed the minutes of its 21st Meeting held on 19.03.2014.

BWC:22 (2014)-03: To report on the action taken on the decisions made in the 21th Meeting of BWC held on 19.03.2014 and to discuss matters arising out of the minutes.

The report on the action taken on the decisions made in the 21st Meeting of the BWC held on 19.03.2014 is presented for BWC's consideration.

BWC noted the followings.

- 1. For item No: 8(4&5): BWC decided to go for fresh tender for kitchen equipment, after minor revision of the BOQ.*
- 2. For item No: 8(6): BWC advised Executive Engineer (Estate Maint.) to dismantle the cycle shed in front of MN Dept. and common boundary wall between MN and CR Departments.*
- 3. For item No: 8 (7): Dean (PD) was advised to expedite the extension of Dinning hall of Guest House (South Block).*
- 4. Departmental Store: It was decided to use the existing space of community hall for starting the departmental store with the help of a suitable vendor with a reasonably large network of stores and fixed price.*

[Annexure-A1, Page No.21-22]

B) REVIEW OF ONGOING PROJECTS:

BWC:22 (2014)-04: Review of ongoing Civil Projects.

A report on the progress of ongoing Civil Projects was enclosed for perusal of the Committee.

All the ongoing Civil Projects were reviewed.

BWC considered recent theft cases in the Qr. No. B-6 & B-17. Executive Engineer (Estate Maint.) was advised to strengthen the door system of toilets in A, B, C type of quarters.

- 1) *M/s UPRNN has completed all the projects Bio Medical Science Building, Electronics and Electrical Science Building, Lecturer Hall Complex, Faculty Residences, Hostel Building. The finishing work is going on in Electronics and Electrical Science Building, Fire fighting equipment etc. All the work will be completed by 31.08.2014.*
- 2) *The progress of M/s Shapoorji Pallonjje is satisfactory. Two blocks of 370 rooms in the Satish Dhaban Hall of Residence are likely to be completed by 31.10.2014.*

[Annexure-A2, Page No.23-27]

BWC:22 (2014)-05: Review of ongoing Electrical Projects.

A report on the progress of ongoing Electrical Projects is enclosed for perusal of the Committee.

All the ongoing Electrical Projects were reviewed.

1. 33 KV Hot Line from Chhend to NIT

Prof. Y.K. Sahu, VP(Elect.) was advised to contact M/s OPTCL for completion of 33 KV bay at chhend. Stringing of conductor between OPTCL grid and koel nagar is in progress. Stringing of conductor between Koel Nagar to NIT is completed. Bay work in 33KV REC SS completed. Inspection by Electrical inspector completed for Koel Nagar to Nit campus line. NBLs tower foundation work completed in sector -16. Tower foundation work completed in sector-20 area. Cable laying completed in OPTCL grid and Airport road crossing. The line is expected to be charged by 30th Sept. 2014. Necessary time extension may be awarded to the contractor.

2. 33 KV Substation

M/s Blue Star was advised to expedite the work for timely completion. Erection of equipment in all substations (except transformer in SS-7) completed. LT cable termination and DAS control cable laying in progress. External lighting work of substations in progress. Gravel laying in progress. Inspection by Central Electricity Authority completed. Compliance of Electrical inspection Report submitted. Meeting cable received from WESCO installed. 33 KV line to be charged after getting clearance from Central Electricity Authority. Discussion with WESCO authority is in progress for both 11KV and 33KV supply for transition from 11KV to 33 KV system.

It was informed that some substations will be charged by 1st week of September and the total work will be completed by end of September. Necessary time extension may be awarded to the contractors.

[Annexure-A3, Page No.28-34]

C) ADMINISTRATIVE PROPOSAL FOR NEW PROJECTS – PART-'A':

BWC:22 (2013)-06: PROPOSAL FOR NEW PROJECTS:

1. Providing Wooden Bulkheads to existing AC units in all rooms and dining halls in South & North Guest House.

Central AC units have been installed during Phase – I project in all the 50 rooms and dining halls of South & North Guest Houses. However, bulkhead enclosures in these existing AC units have not been provided and units are exposed. For aesthetic reasons, it is therefore proposed to provide wooden ply bulkheads to all the existing AC units of South & North Guest Houses.

This will cost about Rs. 7.0 Lakhs.

The BWC approved the proposal.

2. Construction of Boundary Wall around 5MLD Water Treatment Plant.

Construction of the new 5MLD Water Treatment Plant is planned to be completed within few months. However, the construction of the compound wall around the plant is not included the scope of the present contract. For security reasons, it is now necessary to take up the construction of the compound wall with a gate on priority basis (sketch enclosed). The length of the compound wall will be about 400.0 m. This will be cost Rs.21.53 Lakh (Details enclosed).

The BWC approved the proposal.

3. Review of Selection of Architects for Important Buildings.

The BOG vide resolution No BOG-40(2014)- 05, dt. 09.05.2014, on the recommendation of the Finance committee has approved the proposal to take up the following important works **(Copy enclosed)**:

- 1) Planning & Architecture Building
- 2) 120 Seated Married Hostel
- 3) Construction of Boundary Wall and Building NIT, Rourkela Extension Center at Bhubaneswar.

- In addition to the above buildings, earlier it was approved by BOG vide resolution No BOG-38(2014)- 05, dt.17.01.2014, to take up Renovation of Existing Academic Buildings on priority **(Copy enclosed)**.
- Hence, the selection of Architects will be done for the four buildings/ items out of the followings Architects who were qualified for the Major Projects (Phase III) and also who worked for the Institute in the past.:

- 1) M/s Jay Ambe Ground Designers Pvt Ltd
- 2) M/s Arch-en Design
- 3) ENARCH Consultants (P) Ltd.
- 4) M/s Suresh Goel & Associates
- 5) M/s Development Architects Pvt Ltd.
- 6) M/s DDF Consultants Pvt Ltd.
- 7) M/s Mukesh Associates
- 8) M/s Inform Architects.
- 9) M/s BOSE BROTHERS ARCHITECTS
- 10) M/s Vastukar Architects
- 11) M/s Space Arch
- 12) M/s Design Techno

- They have been asked to submit Conceptual plan for each of the buildings and participate in the presentation. The selection will be done based as quality cum cost basis. The last date of receipt of Conceptual plan has been kept on 04.08.2014 and the presentation date on 16.08.2014.

4. Construction of (1) Planning & Architecture Building (2) Married Students' Hostel (3) Bhubaneswar Extension Centre (4) Renovation of Existing Buildings.

The BWC was informed that in view of the budget crunch, all new project proposals have been put on hold; but the above four projects have been approved by the BOG in view of their urgency.

The BWC reviewed the progress of the architectural competition and approved the composition of expert committee given in Annexure. The Committee authorised the Chairman to approve the recommendation of the Selection Committee and recommend to BOG for award of consultancy contract as per their recommendation.

It was further felt that the two buildings - that of Planning & Architecture and the Married students' Hostel are small structures compared to the present contract with M/s Shapoorji Pallonji and are of same nature. The cost involved can be accommodated within the safety margin of the estimate of the ongoing work plus permissible deviation.

The BWC recommends to BOG to approve inclusion of the two buildings costing less than Rs.45 Crore in the existing contract, if M/s Shapoorji Pallonji agrees to work at the original rate without asking for escalation. Time extension up to one year may be given if requested. If permitted by the BOG, the institute may discuss with M/s Shapoorji Pallonji regarding other terms and conditions.

The other two contracts will be put on tender after receiving BOG approval.

[Annexure-A4, Page No.35-40]

D) APPROVAL OF BOQ AND ESTIMATE FOR TENDERING NEW PROJECT- [PART-'B']:

BWC:22 (2013)-07: PROPOSAL FOR APPROVAL OF BOQ AND ESTIMATE FOR TENDERING FOR NEW PROJECT :

Provision of Kerb Stones, drain and road marking on some newly Constructed Roads.

Construction of many roads in the academic and campus area has been completed recently. It is now felt necessary to provide kerb stones and drains for the following roads:

- Northern Avenue
- Western Avenue

Further, it is also felt necessary to provide road markings on the following roads which have been black tapped recently:

- Northern Avenue
- Western Avenue
- Technology Avenue
- Southern Avenue
- Road No. 4
- Road No. 2

Specifications, BOQ and estimate have been prepared in house, which are enclosed. The estimate amounts to Rs.80.97 Lakhs.

The BWC approved the proposal with following suggestions.

1. *The above work is a part of the existing contract for the construction of road by M/s Damodar Engineers and should be taken up immediately after the monsoon.*
2. *Wherever necessary consisting the traffic, construction of footpath should be considered.*

[Annexure-A5, Page No.41-54]

E. APPROVAL OF TENDER FOR AWARD OF WORK [PART-'C']:

BWC:22 (2013)-08: REPORT ON AWARD OF WORKS TO CONTRACTORS.

1. Provision of floor tile in the Rajendra Mishra Exhibition Hall.

Earlier, BWC in its meeting dated 06.09.2013, (BWC: 19 (2013)-06), BWC has given administrative approval for the above work.

The specification, drawings, BOQ and estimate for the above work have been prepared inhouse. The estimate amounts to Rs. 22.43 Lakhs. (Details given in the Annexure).

In response to the Tender for the above work, the following three firms (NIT registered civil contractor) have submitted their offers.

- M/s P.K.Rout
- M/s A.K. Mohanty
- M/s Eastern Infrastructure
- The members of the Committee opened the envelopes containing the EMDs and found that they have submitted required amount towards EMD.
- Then the price bids of the above mentioned firms were opened. It is observed that M/s P.K.Rout have become L₁ at a quoted price of (+) 9.00% above the estimated rates of Rs. 2243437.50.
- The member of the committee called Sri. P.K. Rout and requested him to reduce his rates. After prolong discussion, he agreed to reduce his rate to 5.00% above the estimate.
- The Tender Committee recommended to award the work to M/s P.K.Rout at a price of 5% above the estimate (i.e. Rs. 23,55,609.38)

The BWC approved the proposal.

2. Laying of 3rd Phase Central AC System Pipelines under Road Crossings.

The specification, drawings, BOQ and estimate for the above work have been prepared inhouse. The estimate amounts to Rs. 29.42 Lakhs. (Details given in the Annexure).

- Total three (3) tenders have been received against short notice open tender advertisement invited through newspapers and Institute's web-

site. Tenders were opened on due date 28/05/2014 by the Tender Committee.

- On scrutiny, it is observed that all the three firms have furnished demand drafts towards the cost of tender document and EMD. All the three firms have experience in executing HDPE water pipelines and have adequate annual turnover. Hence, the price-bids of all the three firms have been opened. Their quoted prices inclusive of taxes & duties are as given below.

<u>Name of the Firm</u>	<u>Quoted Price</u>	<u>Status</u>
• M/s Intek Associates	Rs: 20,37,716.83	L-1
• M/s Teknokom Irrigation Pvt. Ltd.	Rs. 23,54,402.00	L-2
• M/s YPB Impex Pvt. Ltd	Rs: 24,03,332.00	L-3

- M/s Intek Associates became L-1, against the estimated cost of Rs. 29,42,136.00. The Tender Committee recommended to award the subject work to M/s Intek Associates on L-1 basis. (i.e., 31% below the estimate).
- The BOQ quantities such as length of pipeline, bends etc. may vary during underground erection work to suit the site condition and hence, a provision of 10% quantities of such items amounting to Rs: 2,03,391/- is required to take care of any variance. Fund requirement and the work order value will be limited to Rs: 2237306/- (ie., Rs: 20,33,914.91 + Rs: 2,03,391.49).

The BWC approved the proposal.

3. Construction of New Roads and Widening of Existing Roads (Phase-IV)

Earlier, BWC in its meeting dated 13.12.2013, (BWC: 20 (2013)-10), BWC has given administrative approval for the above work.

The specification, drawings, BOQ and estimate for the above work have been prepared inhouse. The estimate amounts to Rs. 754.86 Lakhs.

- In response to the advertisement in Newspapers and NIT website, the offers from following five firms have been obtained:
 - M/s Jitendra Prasad, Rourkela
 - M/s Damodar Engineer, Rourkela
 - M/s U.S.S Construction, Rourkela
 - M/s T.S.K.Patra, Rourkela
 - M/s BMP & Sons Constructions, Rourkela

- First, the Envelopes (No-1) containing the EMDs were opened. It is observed that all the above mentioned firms have deposited required amount of Demand Draft and Bank Guarantee.
- Then, Envelopes (No-2) containing Techno-Commercial Bids were opened. It is felt to prepare a technical comparative statement containing registration details, experience, equipment in possession etc.
- It is observed that all the above mentioned firms are not in possession of Road Roller of width smaller than 1200 mm. Therefore, it was decided to inform all the firms to give an undertaking that in the event of award of the work, the firm shall procure the same within one month from the date of award of work.

The members of the committee went through the technical comparative statement (Copy enclosed) indicating registration details, experience, equipment in possession etc. The members of the committee found that all the above mentioned firms are technically qualified for the work.

- The members of the committee also went through the letter obtained from the above mentioned firms giving undertaking for procurement of smaller width Roller within one month from the date of award of work.
- Then the members of the committee opened the price bids in the presence of their representative. It is observed that M/s Damodar Engineer have become L1 at a price of (-) 17.1% below the estimate and M/s Jitendra Prasad have become L2 at a price of (-) 16.0% below the estimate.
- The members of the committee called the representative of M/s Jitendra Prasad and requested to match his rates with L1 Tenderer (i.e. M/s Damodar Engineers) to which he agreed.
- After discussion with the L1 and L2 Tenderers, both of them gave undertaking that with the agreed rate i.e. (-) 17.1% below the estimate, they will execute the work conforming to specifications and quality to the satisfaction of NIT officials and adhering to the time schedule.
- Considering the above, the members of the committee recommended to award the work to M/s Damodar Engineers and M/s Jitendra Prasad at a rate of 17.1% below the estimated rates for Part 'A' (value= Rs.375,46,987.86) and Part 'B' (value= 250,31,324.99) respectively.

The BWC approved the proposal.

4. Appointment of Consultant for Low-End HVAC TIIR Building.

Earlier, the BWC in its 21st Meeting held on 19.03.2014 (BWC: 21(2014)-07) had given administrative approval for entrusting the Low end HVAC work to M/s Mukesh Associates who are the Architects for the above building.

- Accordingly, M/s Mukesh Associates were informed that there will be provision of air conditioning tentatively for the whole building except work shop, canteen, toilets, corridors, but ventilation wherever necessary and connected electrical works etc in the low- side HVAC works. The exact requirement of HVAC Low- side work will be decided during concept design stage. The present contract does not include Low- end HVAC work and if awarded to M/s Mukesh Associates, this will be an amendment to the contract as additional work. Letter of M/s Mukesh Associates is enclosed.
- The representative of M/s Mukesh Associates informed to the committee that they have rendered HVAC services in many projects, copies of work orders/ agreements of which have already been forwarded to NIT, Rourkela earlier. The same were also discussed in the meeting.
- A copy of the schedule of payment for HVAC works as agreed for other Architects for Major Projects (Phase II) for Low- end HVAC works of NIT was shown to the representative of M/s Mukesh Associates to which he agreed.
- The representative of M/s Mukesh Associates informed the committee that their fee for the HVAC service shall be 1.98% of additional works + service tax (to be reimbursed by NIT) which is the original rate and they cannot reduce any further.
- Considering the above, the members of the Committee recommended to award the Low- end HVAC works for the TIIR building to M/s Mukesh Associates, Salem at the original rate of 1.98% + service tax. Accordingly, an amendment to the contract as additional work should be issued.

The BWC approved the proposal.

5. Proposal for Provision of Additional Structural supports to Chilled Water Pipes in the AC Plant Building.

Earlier, BWC in its meeting dated 19.03.2014, (BWC:21(2014)-08), BWC has given administrative approval for the above work.

The specification, drawings, BOQ and estimate for the above work have been prepared in-house. The estimate amounts to Rs.15.0 Lakhs.

In response to the Tender for the above work, the following three firms (NIT registered civil contractors) have submitted their offers.

- M/s Rourkela Fabrication works
- M/s A.K. Mohanty
- M/s Eastern Infrastructure
- The members of the Committee opened the envelopes containing the EMDs and found that they have submitted required amount towards EMD.
- Then, the price bids of the above mentioned firms were opened. It is observed that M/s Rourkela Fabrication Works have become L₁ at a quoted price of (+) 17.5% above the estimated rates of Rs.15,00,945.91.
- The member of the committee called M/s Rourkela Fabrication works and requested him to reduce his rates. After prolong discussion, he agreed to execute the work at 16.0% above the estimate.
- The Tender Committee recommended to award the work to M/s Rourkela Fabrication works at a price of 16.0% above the estimate (i.e. Rs. 17,41,097.26).

The BWC approved the proposal.

6. Interior Furnishing Work of Library Building and Additional Civil Work at Entrance of Library Building (Balance Works).

Earlier, BWC in its meeting dated 19.03.2014, (BWC: 21 (2014)-08), BWC has given administrative approval for the above work.

The specification, drawings, BOQ and estimate for the above work have been prepared in house. The estimate amounts to Rs.23.15 Lakhs.

- In response to the Tender for the above work, the following three firms have submitted their offers. in three parts (i.e. EMD, Techno commercial Bid, & Price Bid)
 - M/s Eastern Infrastructure
 - M/s Rourkela Fabrication Works
 - M/s Indian Project Associates
- The members of the Committee opened the envelopes containing the EMDs and found that they have submitted required amount towards EMD. They are also found qualified for the above work.

- Then the price bids of the above mentioned firms were opened. It is observed that M/s Eastern Infrastructure have become L₁ at a quoted price of (+) 43.00% above the estimated rates of Rs. 23,15,835.74.
- The member of the committee called M/s Eastern Infrastructure and requested him to reduce his rates. After prolong discussion, he agreed to reduce his rate to 25.00% above the estimate.
- The Tender Committee recommended to award the work to M/s Eastern Infrastructure at 25% above the estimate (i.e. 28,94,794.68).

The BWC approved the proposal.

7. Fresh Air Ventilation System for Dining Hall.

Earlier, BWC in its meeting dated 13.12.2013, (BWC: 20 (2013)-06), BWC has given administrative approval for the above work.

Open tenders were invited for design, supply, erection and commissioning on turnkey basis including one year operation and maintenance.

Technical specifications, estimate and tender notice have been prepared in-house the estimate amounts to Rs. 79.0 Lakhs (Copy enclosed in the Annexure).

- The price-bid of M/s Aircon India Inc., has been opened in the presence of members of the Committee and representatives of M/s Aircon India Inc., on 29/04/2014.
- The price quoted by them is Rs:59,81,101/- which is within the estimated cost. The quoted price is inclusive of one year operation and maintenance of the system. The Committee recommended to award the subject work on M/s Aircon India Inc..at an amount Rs:59,81,101/- (Rs fifty nine lakhs, eighty one thousand, one hundred one only). The firm has requested to place order on M/s Aircon India Incorporated, Bhubaneswar.
- The BOQ quantities such as ducting, plumbing, cabling etc. may vary during detailed engineering work to suit the site condition and hence, a provision of 25% quantities of such items amounting to Rs:7,61,733/- may please be approved to take care of any variance. Fund requirement and the work order value will be limited to Rs:67,42,834/- (ie., Rs:59,81,101/- + Rs:7,61,733/-).

The BWC approved the proposal.

8. Supply of Make-up Water to Central AC Plant.

A scheme has been prepared in house for plumbing make-up water from sump to roof top cooling towers and Chilled water supply system of ongoing centralized AC system. The BOQ and estimate have been prepared in house and the estimate amounts to Rs.2.34 Lakhs.

Open tenders were invited from NIT registered civil contractor of class 'D' & 'C'

- In response to the Tender Notice for the above work, the following four firms have submitted their offers:
 - M/s S.K. Sahoo
 - M/s S.K. Das
 - M/s B.K. Enterprises
 - M/s Sudarshan Dash
- The members of the Committee opened the envelopes containing the EMDs and found that they have submitted required amount towards EMD.
- The members of Tender Committee found that the above firms are registered civil contractors of NIT and have done similar works in NIT and qualified for the work.
- Then the price bids of the above mentioned firms were opened. It is observed that M/s Sudarshan Dash have become L₁ at a quoted price of (+) 8.5% above the estimated rates of Rs. 234345.09.
- The member of the committee called Sri. Sudarshan Dash and requested him to reduce his rates. After prolong discussion, he agreed to reduce his rate to (+) 6% above the estimate.
- The Tender Committee recommended to award the work to M/s Sudarshan Dash at a price of Rs.248405.80 which is 6% above the estimate.

The BWC approved the proposal.

9. Appointment of Consultant for Acoustic Treatment in Auditoriums, Dining Halls of Hostels etc.

The following buildings have already been completed and in use. But acoustic problem is being faced to a great extent in these areas and hence, require treatment:

Auditoriums:

- Lecture Hall Complex No-I (360 seated -2 Nos, 240 seated- 4 Nos & 120 seated- 4 Nos)
- Exhibition Hall (One) (i.e. first floor of AC Plant Building)

Dining Hall:

- V.S Hall
- GD Birla & Visweswaraya Hall
- Ambani & Swaminathan Hall

Open tenders have been invited for selection of Consultant through advertisement in Newspaper and NIT website. In response to the same, the following four (4) firms have submitted their offers.

1. M/s Rahul Enterprises
2. M/s Sonic Acoustic Solutions
3. M/s P.S. Subramanian Associates
4. M/s Mukesh & Associates

The technical comparative statement for these firms is in progress. After pre-qualification of the firms, price bid will be opened.

The BWC approved the proposal.

10. Installation of Two MW Capacity Solar Power Plant.

Earlier, the BWC in its meeting held on 13.12.2013 (BWC: 20 (2013)-06) has approved installation of a Solar Power Plant of capacity Two (2) MW.

In response to the advertisement for 'Expression of Interest' for the above work in Newspapers and NIT Website, the following firms have submitted their offers:

- 1) M/s Jakson Engineers Ltd.
- 2) M/s Chemtrols Solar Pvt. Ltd.
- 3) M/s Millenium Synergy Pvt. Ltd.
- 4) M/s Photon Energy System Ltd.
- 5) M/s Greenlife Energy Solution LLP
- 6) M/s Rays Power Infra Pvt. Ltd.
- 7) M/s Emerson Network Power (I) Pvt. Ltd.
- 8) M/s Vikram Solar Pvt. Ltd.
- 9) M/s Lanco Solar Energy Pvt. Ltd.
- 10) M/s K.C. Sahoo (P) Ltd.
- 11) M/s Bosch Ltd.

- 12) M/s PiBS SiLP Ltd
- 13) M/s TATA Power Solar Systems Ltd.
- 14) BHARAT HEAVY ELECTRICALS LTD.
- 15) M/s Godrej & Boyce Mfg. Co. Ltd.

The above mentioned firms gave their presentation on Dt. 25.02.14 regarding the specification/ technology followed etc in the Solar Power Plant Installed by them. Based on the information obtained, the specification to be adopted in our case is being finalized. Thereafter, the tender documents will be issued to those firms who have already submitted their offers for submission of price bids.

The BWC approved the proposal with following suggestion.

Suitable islanding scheme should be considered before finalization of the contract.

11. Completion of Air Conditioning work of TIIR Building:

Earlier, BWC in its meeting dated 19.03.2014, (BWC:21 (2014)-07) has given administrative approval for the above work.

The civil, electrical, sanitary and public health works for the TIIR Building have been entrusted to M/s S.P. Padhi, contractor. The entire work is planned to be completed by September, 2014. However, the air conditioning work inside this building is yet to be taken up. The building Architect, M/s Mukesh Associates, who been entrusted with the HVAC work covering both low and high side works. Are working out the detailed specifications, BOQ, estimate etc. These will be finalized soon. A rough estimated of the cost for the complete HVAC work stands at Rs. 5.0 crores at the rate of Rs. 1 lakh per TR. The BWC will be kept posted on the progress of the estimate etc.

The BWC approved the proposal and directed the administration to proceed with the tendering process.

12. Completion of Central Air Conditioning work in Academic Buildings:

Considering the benefits of long service life, higher energy efficiency and reduced installations cost as a consequence of large diversity factor, the institute has made a conscious decision to go for central air conditioning of

all academic buildings. A Centralized AC Plant Building has been constructed in a central location of the Institute. This presently houses the chillers, pumps, motors etc. of capacity 720 TR. There is further provision of additional four chillers in this Building of each 900 TR capacity for the academic buildings under construction. Major pipelines have also been installed.

A good part of the high side work such as chillers, cooling Towers and connection to Booster Pump House has also been completed

For the following buildings, the low side specifications and BOQ are ready and tendering is to be done shortly.

- Biomedical
- Lecture Hall Complex No-I
- Electrical Science Building.
- Chemical Engineering
- Mining Engineering Department.
- Ceramic Engineering Department
- Main Administrative Building(East Side Only)

The BOG vide resolution No-bog-40(2014)-05, dt 09.05.2014 has advised completion of Air Conditioning system for **Biomedical, Electrical & Electronics Science Building and Lecture Hall Complex No-I on priority. (Copy enclosed).**

For the following buildings, low side work has already been awarded to M/s Shapoorji Pallonji Co (P) Ltd and the work is to be started soon. The high side work has partly been done.

- Lecture Hall Complex No-II
- Mechanical Science Building
- Golden Jubilee Building

It is estimated to cost Rs. 20.0 Crores for completion of balance Central Air Conditioning work as stated above. This will be spent in two years' time at Rs 10.0 crores per year. The BWC will be kept posted on the progress of the estimate etc.

The BWC approved the proposal and directed the administration to proceed with the work of estimating and tendering the balance work, both high side and low side works, to complete the air conditioning project within the next two years.

13. Laying of Sewer Line Network for Hostels, Campus Quarters & Academic Building and Construction of Oxidation Pond.

During November 2011, the tendering action was initiated for the Sewerage network system based on the BOQ and tender documents submitted by the Consultants, M/s Environmental Engineers Consortium, Kolkata. However, just before finalization of the Tender, a team of engineers from M/s Orissa Water Supply & Sewerage Board along with their Consultant arrived at NIT, Rourkela and informed that the Govt. of Orissa has undertaken the total work of Sewerage network and STP plant construction for the entire Rourkela Township. Based on the survey conducted by them, they advised that the sewerage collected from NIT area can be discharged into two of the designated collection pits outside the premises of NIT, Rourkela from where the same will be taken into sewerage network system of Rourkela Township and treated in their STP. It is now understood that the above scheme suggested by M/s OWSSB has been deferred indefinitely. Considering this, it is necessary to initiate action for Tendering for laying of sewer line network with minor modifications, wherever necessary. The estimate amounts to about Rs. 5.5 Crores (As per the estimate given by the Consultant).

Further, it has also been decided not to go for Sewerage Treatment Plant in view of prohibitive maintenance cost and large manpower requirement for operation and maintenance. Instead, as per advice of our Consultant, we may go for Oxidation ditch Facultative, aerated lagoon and ancillary works for recycling of treated water for gardening etc. This will cost about Rs. 4.5 Crores (as per the estimate given by Consultant) (Copy enclosed). Hence, the total cost will be about Rs. 10.0 Crores. The BWC will be kept posted on the progress of the estimate etc.

The BWC approved the proposal.

[Annexure-A6, Page No.55-60]

F. DEVIATION AND EXTRA ITEMS FOR VARIOUS WORKS [PART-'D']:

BWC:22 (2013)-09: Proposal for approval of Deviation and extra items for various works:

1. Extra Items for “Extension of Chemical Engineering Department” (Agency: M/s S. P.Padhi).

The extra item statement for extension of Chemical Engineering Department is given in the Annexure. The work order for the above work was awarded to Er. S.P.Padhi vide Work Order No NITR/PW/WO/CT/6610-11/70, Dated-15/06/2010 for a value of Rs. 11,19,70,715.00.

During the course of execution, it has been decided to provide some additional items such as kota stone flooring, chequered precast cement concrete tiles, paver concrete tiles etc. which were not envisaged in the original scope of work. Hence, these have become extra items.

The estimated cost of the same comes to Rs. 46.35 Lakh. These are mainly substitute items and there will be no increase in the contract value.

The BWC approved the proposal.

[Annexure-A7, Page No.61-64]

2. Deviation for “Construction of Dormitory for Mess & Security staff for CV Raman Hall” (Agency: M/s S.K. Mohanty)

The deviation statement for Construction of Dormitory for Mess & Security staff for CV Raman Hall is given in the Annexure. The work order for the above work was awarded to M/s S.K. Mohanty vide Work Order No NITR/PW/WO/CT/15/13-14/15, Dated-22/05/2013 for a value of Rs. 15,35,589.00

During the course of execution, there has been some deviation in the quantity indicated in the Bill of Quantities as per contract. However, the overall deviation amounts to (+)1.62 %.

The BWC approved the proposal.

[Annexure-A8, Page No.65-84]

3. Extra Item for “Extension of CV Raman Hall of Residence” (Agency: M/s P.D. Agarwal)

The extra item statement for Extension of CV Raman Hall of Residence is given in the Annexure. The work order for the above work was awarded to

M/s P.D.Agarwal vide Work Order No NITR/PW/WO/CT/37/10-11/38, Dated-20/05/2010 for a value of Rs. 20,34,98,878.00.

During the course of execution, it is decided to provide one additional item i.e.15mm dia conceal stop cock, which was not envisaged in the original scope of work. Hence, this has become extra item. The estimated cost of the same comes to Rs. 1,24,395.66. However, there will be no increase in the contract value.

The BWC approved the proposal.

[Annexure-A9, Page No.85-86]

4. Extra Item for “Linking of South and Central Academic Building (Eastern side)” (Agency: M/s Sakuntala Enterprises).

The extra Items, for Linking of South and Central Academic bldg eastern side are given in the Annexure. The work order for the above work was awarded to M/s Sakuntala Enterprises vide Work Order No NITR/PW/WO/CT/04/13-14/04, Dated-08/04/2013 for a value of Rs. 61,72,861.00.

During the course of execution, it is decided to provide some additional items such as provision of aluminum partition walls with door, 20mm cement plaster etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 3,96,418.00. However, there will be no increase in the contract value.

The BWC approved the proposal.

[Annexure-A10, Page No.87-89]

5. Extra Item, for “Construction of first floor including finishing work of GF, Cooling tower, supporting structure etc for AC plant building (PH-II)” (Agency: M/s P.K. Rout).

The Extra Item statement for Construction of first floor including finishing work of GF, Cooling tower, supporting structure etc for AC plant building (PH-II) is given in the Annexure. The work order for the above work was awarded to M/s P.K. Rout vide Work Order No NITR/PW/WO/CT/11/12-13/11, Dated-03/05/2012 for a value of Rs. 1,21,07,898.00.

During the course of execution, it is decided to provide some additional item such as provision of cement primer, 50mm GI pipes, water proofing, modular toilet cubicle etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 7,44,867.64. These are mainly substitute items and there will be no increase in the contract Value.

The BWC approved the proposal.

[Annexure-A11, Page No.90-92]

6. Extra Item for “Construction of Proposed extension of S.S. Bhatnagar Hall” (Agency: M/s P.K. Rout)

The Extra Item, statement for Construction of Proposed extension of S.S. Bhatnagar Hall is given in the Annexure. The work order for the above work was awarded to M/s P.K. Rout vide Work Order No.NITR/PW/WO/CT/14/12-13/14, Dated-06/06/2012 for a value of Rs. 108674171.00

During the course of execution, it is decided to provide some additional item such as provision of 22mm thick precast cement concrete tiles, 60mm thick inter locking block, poly carbonate sheet, frame less toughened glass etc which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 22,56,925.55 There are mainly substitute items and these will be no increase in the contract Value.

The BWC approved the proposal.

[Annexure-A12, Page No.94-96]

7. Extra Item & Deviation for “Addition and Alteration of Campus High School Building” (Agency: Nirman Construction).

The extra item and deviation statement for Addition and Alteration of School Building is given in the Annexure. The work order for the above work was awarded to M/s Nirman Construction vide Work Order No NITR/PW/WO/CT/37/12-13/37, Dated-17/08/2012 for a value of Rs. 80,74,668.00.

During the course of execution, it has been decided to provide some additional items such as plinth protection, provision of wall putty, brick masonry manhole, GI sheeting, kota stone in flooring and stair case etc, which were not envisaged in the original scope of work. Hence, these have become extra items. The estimated cost of the same comes to Rs. 19.42 Lakhs.

Further, during the course of execution, as per site requirement, there has been some deviation in the quantities of schedule items. The total (+) deviation towards quantities amounts to Rs.9.80 Lakhs. As such, the total deviation in the contract value amounts to Rs. 29.22 Lakhs.

The BWC approved the proposal.

[Annexure-A13, Page No.97-108]

(S. K. Upadhyay)
Registrar & Secretary
Building & Works Committee

(S. K. Sarangi)
Director & Chairman
Building & Works Committee